Bellingham OS-9 Users Group

Gimix, CoCo, Atari, Mac
6809 - 68K OS-9 Level 1, 2, 3

OS—9 MEETINGS:
Meetings are held at 7:30 p.m., the second Thursday of each month in room 109 at

Sehome High School

BENEFITS TO MEMBERS:
As a participating member of our new Bellingham OS9 Users Group you enjoy many
benefits:
  1.   Newsletter
  2.   OS9 Bulletins
  3.   Public Domain Library
  4.   Technical help
  5.   Lectures and demonstrations
  6.   Periodic group purchases
  7.   Membership List
  8.   Access to GIMIX Level-III OS9

HELP WANTED!
Our group needs editorial volunteers. If you can contribute with information o:
helpful experiences of your own, please contact Rodger Alexander. The health o.
ˆur newsletter depends on contributions made by many members of our group.

IN THIS ISSUE:

SUBSCRIPTION INFORMATION:
Newsletters are available free to those in attendance at the monthly meetings.
If you would like to receive the newsletter in advance by mail a subscription
rate of $3 for 6 monthly issues or $6 for 12 monthly issues is available.

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PLEASE NOTE: JUNE MEETING IS THURSDAY THE 21st INSTEAD OF THE 14th

Homework

by Brian Stretch

This article will explain how to customize your OS-9 Level II system disk to boot up in 80 columns, 6ms, 40/80 tracks, double sided drives, or any combination of the above, how to MERGE modules to save memory and other ideas for your custom system disk. The example values given for the patches are for 80 columns and monochome (white letters on a black background), 6ms, and 2 40 track/DS drives.

First, if you want 80 columns, you must CONFIGure a new Level II disk. This is necessary so you can get the WINdow descriptor instead of VDG. Also, be sure to pick one of the DDD0 drive descriptors!!! MUCHO IMPORTANTE to OS-9 use!

MODPATCH:
Use BUILD or any text editor and create the following modpatch files:

Drive.patch
l d0
c 14 00 03 * <--14=Step rate 03=6ms 00=20ms
c 18 23 28 * <--18=# of tracks 23=35 tracks 28=40 tracks 50=80 tracks (hex!)
c 19 01 02 * <--# of sides. Getting the hang of this yet???
v   * <--Verify: get new CRC and unlink

Now enter: "MODPATCH Drive.patch"
(P.S. Changes to the Disk Drive descriptors can be made more easily using the DMODE utility: Enter: "DMODE step=3 tracks=40 sides=2")

80Col.Mono
l term
c 30 01 02 * <--Screen type: 0=32, 1=40, 2=80. Only 1 & 2 are valid for WIN
c 2C 28 50 * <--Screen width: 28=40, 50=80 (hex)
c 33 00 00 * <--Forground color, will give error the first time!
c 33 00 00 * <--Will change byte for real now. Couldn't figure the old value.
c 34 02 02 * <--Background, will also give an error
c 34 02 02 * <--Der we go!
c 35 02 02 * <--Border
c 35 02 02
v

To get more info about modpatch, you can read your documentation, or just type MODPATCH -?.

DSAVE:
Now, format your system disk-to-be in drive /d1 (or wherever), and COBBLER it. When this is done, type:
   dsave /d0 /d1 ! shell

...to copy all the files on your old system onto your new one. Delete whatever you don't want to keep. On a 40 track/DS drive, you'll have 1440 sectors to play with!

If you only want to copy one directory, like CMDS, type:
   chd /d0/cmds
   dsave /d0 /d1 ! shell

(P.S. There also exist a utility called DIRCOPY which is much more flexible and available on Bellingham OS9 Users Group Library (PD.Utility Disk#2))

MERGE:
Now, here's how to merge modules. Type:

   chd /d0/cmds
   merge wcreate xmode free etc... etc.... >/d0/cmds/modules

You will now have the file "modules" in your CMDS directory. I have 3 sets of modules load in on startup. Each modules file must be NO MORE THAN 8k LONG! Otherwise, if the system only has 8k free in its 64k working environment and it links to a 16k block of modules, its error city. If you're lucky enough to have a hex calculator, add up the lengths of the modules until the block is almost $2000 bytes long. I have R/S's EC-4014 scientific calculator.

XMODE:
Before we go off and make a new STARTUP file, let's set the printer and RS-232 Pak baud rates. XMODE does this. Here's how it's used:

   xmode /p baud=4 (sets your printer to 2400 baud)
   xmode /t2 baud=3 (sets your RS-232 Pak to 1200 baud)

Get the idea? The baud values are: 1=300, 2=600, 3=1200, 4=2400, 5=4800, and 6=9600. Don't quote me on all of those tho-- if the value doesn't work, try a higher or lower one. I'm positive about 3 & 4 only since that's all I use. ECHO something out the device to test it, like ECHO Hello! >/p.

RAMDISK:
Also, for those of you who have Kevin Darling's Level II Ramdisk and don't know how to use it, here's what ya do. Either use DMODE to set the tracks=# of 8k blocks, or MODPATCH location $18 in r0. Example:

   l r0
   c 18 02 0d

...gives a 100k (416 sector) ramdisk. Now, INIZ R0, and format /r0. Voila!

If you haven't done so already, put your new system disk in drive 0 and type CHX /d0/cmds. Now, let's make the new startup file. Type:

   rename startup old.startup
   build startup
   link shell
   echo Your welcome message here.... (no !'s or /'s!)

```
    load modules
    load Ramdisk    <--Kevin Darling's Ramdisk
    iniz r0        <--I modpatch'ed and re-saved it
    format /r0  r "Ramdisk" <--Formats ramdisk
    xmode /p  baud=4 <--set baud to whatever you want
    xmode /t2 baud=3 <--Ditto
    setime </1
    date t
```
(put whatever else you want in, then hit enter on a blank line)

Der ya go! If you want, you can hit <RESET> now and try it out. Another thing you may want to put in your startup file is a couple lines to put in a background window. Speaking of which, for those of you who are still INIZing your windows, there's an easier way: Wcreate. Try this:

```
    wcreate /w1 -s=2 0 0 80 24 0 2 2
    shell i=/w1&
```

Hit <CLEAR>. You now have a nice, 80 column monochrome graphics window. Here's what those #'s in Wcreate are: (typing Wcreate -? does the same)

> -s=2: Screen type. 1=40, 2=80. Remember the
>   TERM patch?
> 0: Starting x-cord
> 0: Starting y-cord
> 80: 80 chars. wide
> 24: 24 chars. deep
> 0: Foreground (text) color (white)
> 2: Background color (black)
> 2: Border color (black)

Naturally, you can substitute /w2, et cetra. If you want to make multiple windows on the same screen, you MUST either be on that screen while creating them, or type:
    wcreate /wn x y fc bc bd >/ws (/ws=screen of first window)

Whew! I hope you've enjoyed your all-around tour of Level II. Be sure to stop by the Falcon's Lair BBS sometime and contribute your ideas on OS-9 or RS-DOS.

OS-9 Level II Patches Compiled by Brian Stretch
The Falcon's Lair BBS (313)429-2150

Q & A

Q: When I put the cover on my CoCo and thus restrict air flow. WOW it really heats up! And I start losing mondo characters from /t2, and Aciapak glitches something wild, sending random linebreaks!!! (The send and recieve lights go on and stay on for a couple seconds at a time, or even longer on a couple of occasions.) (Other than the troubles with /t2, I haven't noticed any other problem as the RAM heats up, but I don't want to take any chances. It gets REALLY hot.) For now, running my CoCo with the cover off is OK. But it would be nice to install a fan in there.

A: No it's not OK. You have the wrong brand of computer. You want to run Al Fresco open air style, get a Commodore 64-a, that's what they're for-a :-). Put a fan in your Coco.
I was really nervous the first time I closed up my case (barely fits over that 1 Meg tower of power), but my fan under the keyboard hole cover keeps it lukewarm at worst.
Well, Cubs fans keep cool with forced beer flow and halter tops. My fan was a Panasonic from RainbowFest, but the $16 model at The Shack is even smaller and nicer, so I'd recommend it highly. Been told it fits right under the stock keyboard. Get the DC power from the NEGATIVE -12 volts (really more like -9) across the smaller stand-up electrolytic capacitor. There's very little other drain on that part of the supply.
---Mike Knudsen---

Q: Can you make an RS-232Pak out of the $10 DC ModemPak?

A: It really boils down to how much you value your time. A new third-party RS-232 pak goes for $50.00 and up. The price of the DC Modem pak is $10, a MAX232 chip goes for $5 (nice chip, converts 5v DC to the necessary line voltages for RS232 operation without the need for a DC-DC converter), a female DB25 connector is $2, and misc. parts are another $2. You're now in for $19 and your time.
The hack itself is pretty easy (even easier if you don't mind permenently disconnect-

ing the modem circuitry). Cut 4 traces between the ACIA and the modem chip (DCD, CTS, Tx, and Rx). Connect these 4 pins on the ACIA to the 4 input/output (depending on which way data is flowing) lines of the MAX232. And finally, connect the the MAX232 to a DB25 connector. A friend removed the ROM and used double-sided tape to hold the MAX232 and mounted to the DB25 on the front side of the case where the ON and CD led's are located. I did mine different since I did not need the casing but his looks very nice...
The OS9 software driver is almost as simple as adding a second serieal port. Just disasmble /t2, change the hardware address to $FF6C, and recompile (or easier - just use Ded or B&B's EZGen).
—Chris Beach—

Q: Regarding the CoCo-4: It may be that I've missed a few points, but it seems to me that you folks are all in favour of the new MM1.

A: As far as I can see, the difference seems to be between people that want OSk NOW, and people that would like a system that they can add OSk to sometime in the future. People doing heavy CoCo3 development seem to prefer the MM1 since they seem to have a good view of what they want, and would rather get the system NOW that will fulfill that. People that are just getting into CoCo3 OS9 seem to prefer the Tomcat, which gives them a 'better' CoCo3 environment with the option of later making the jump to OSk. Actually, I've noticed that almost every Eliminator owner I've heard from likes the Tomcat. I haven't figured out whether these people are loath to throw out an expensive piece of hardware, or whether they're just that impressed with FHL's products.

So the question is: Do you want OSk now, or do you want a faster CoCo3 that you can

later add OSk to? If the former, the MM1 might be preferable, if the latter, you'll probably be more interested in the Tomcat.
—Tim Koonce—
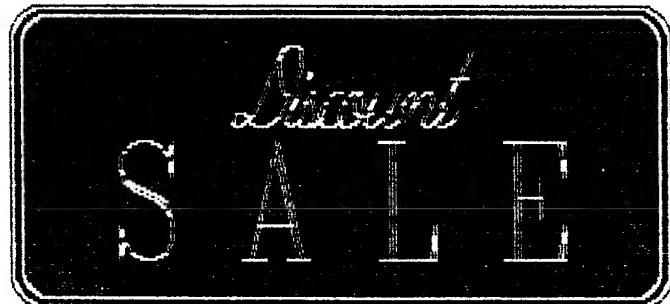
Paul Ward from KLE just called me to tell me about a way we can help each other. He's putting out a special offer on the MM1. If you pre-order and put down $150, you get the machine in August (projected date) for $50 off the selling price of $749. That makes the price $699, and with the $150 down payment, the next payment will only be $549! He says the deposit is guaranteed refundable. They're not going to touch the money. You can also preorder and not put down ANY money, but then you don't get the $50 off.
Here's the important part. He wants to get as many preorders now to give him some extra bargaining power with a certain operating system vendor.
I think we should give him a hand. If you want an MM1, now's the time. To make sure he gets all the MM1 (KMA) fans in on this preorder deal, let your friends know about it.
Check on CIS (Compuserv) for the details. Any questions, fire me email or give me or Paul Ward a ring at (202)232-4246."
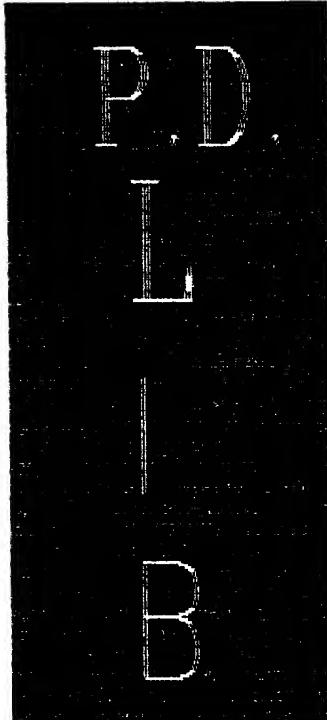—Mike Haaland—

CORRECTION
In last months HOMEWORK article, the Dynacalc script-file requires the addition of the following line:
    tmode .1 abort=07 eof=ff quit=ff
Also, change "dynacalc </1" to "dynacalc </term"

BELLINGHAM OS9 USERS GROUP
PUBLIC DOMAIN LIBRARY

One of the major advantages of a Users Group is the combining of individual resources for the benefit of the group. The collecting and maintaining an OS9 Library is a major undertaking that actually cost a great deal in phone bills, bulletin board access fees and time. The rewards are a large number of files that are often even better than their commercial counterpart.

Below is a listing of our current PD Library. Unfortunately a description of each file cannot be included with the confines of our Newsletter, however a complete listing with descriptions can be had by sending me a SASE (75 cents postage please). Individual files or a complete disk can be had for $1 (WOW!) or for free if you bring your own disk to the meetings.

UTILITY DISK 1:

Archive	PCDos	Pak	WDir	Dearc
Pop	Amputate	Ar	BColor	Call
Border	Cleard	Convert	DirSort	Dls
Eatlf	FColor	IPatch	Label	Lsh
MakPatch	Palette	PrintHelp	QTip	Reset
SortDir	Strip	SysInfo	Tree	Util3
WConfig	Wmode	Zap	Dir	Copy
Purge	DiskOpt	Dupefile	ModUtils	RSDos
SDir				

UTILITY DISK 2:

Demode	Dir	BootSplit	CC2	D
DirCopy	Dmode	Print	Printerr.L2	WGet
Separate	Disasm	UlDir	Compare	RSDir
RSFormat	RSRename	DirUtil	Wmaker	Mail
DiskCat	Morse	ShellScript	Shell21	Crc
Hdo	HDKit	Reback	Ded	

WORDPROCESSING

Sled	UEMacs	ED16	Mroff

SOUND.MUSIC DISK 1:

Lyra	UltiMusE

SOUND.MUSIC DISK 2:

Play	17 play files

GRAPHICS DISK 1:

Othel	Icons	Icon_edit	PrtPix	Clock
Pix	GifOs9	MgePix		

VEF files: Fltbrg, Pgcharts, vefnudes, waterfall, shuttle, balls
                 bitbucket, maxpix, pixloader.

MAC files: Macpict1

MGE files: Oliver, Goofy

GRAPHICS DISK 2:

MandelbrotVefPrt   HomePublisher ClipArt: Groups 1-18

APPLICATIONS

Savage   JerryBench Sieve   Pilot

TELECOMMUNICATIONS DISK 1:

Kermit	Xmodem09	CTerm	Telstar320	BBS
ACIA.MapIn	ACIA.MapOut	DnLoad	remote	XCom9
UpLoad	Autobaud.tsmon	BigT	tube	Dterm
User				

TELECOMMUNICATIONS DISK 2:

WIZPRO: Complete files to create WizPro on your system

TELECOMMUNICATIONS DISK 3:

JTerm   BBTerm   OSTerm208   NewXCom9

PROGRAMMING DISK 1:

Alib   DevPak_C_Update   C_Tutorial(with example files)

DEFS:	arg.h	bool.h	ctype.h	dir.h	direct.h
errno.h	lowio.h	math.h	memory.h	modes.h	module.h
os9.h	phone.h	scfstat.h	setjmp.h	sets.h	password.h
sgstat.h	sgtty.h	signal.h	stdio.h	stdlib.h	string.h
time.h	utime.h	bdraw.h			

PROGRAMMING DISK 2:

KREIDER'S LIBRARY: clibt.lclib.l cgfx.l stdlib2.c

PascalDEFS   Australian_Sculptor (Source and Text files)

DEVICE DRIVER PATCHES:

Clock	Lev2Bugs	Loginfix	PascalFix
Supercom	UltraAcia	Acia.patch	Dynacalc
CC3Disk			

MISCELLANEOUS

Funov   Wind   Windows   Fundow

NOTE: These disk are 40 track double sided (1440 sectors)